



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Subjects.	Ether.	Orange.	Romarin.	Wintergreen.	Menth.	Vanillin.
No. 1 Æ	27 0.5	0.05	0.05	0.005	0.0005	0.0006
No. 2 "	22 1.	0.05	0.55	0.005	0.01	0.0005
No. 3 "	32 1.	0.05	0.05	0.005	0.001	0.00007
No. "	42 1.	1 to 3	0.05	0.05	0.005	0.001
No. "	40 4.	1 to 3	0.8	0.4	0.01	0.005

The different stages of the experiment may be defined as 1, smelling nothing; 2d, smelling something that it is not possible to define, and 3, ability to name the odor correctly. The figures found agree quite closely with those determined by Valentin many years ago.

On the nerve supply of the sense of taste, John Ferguson, M. A., M. D.—Medical News, 1890 Vol. LVII. 395.

It is quite generally admitted that the lingual branch of the fifth nerve and the gustatory branches of the glossopharyngeal carry the nerve fibres of taste to the tongue and palate. Are these the real supply to the parts of taste, or do they simply carry nerve fibres of taste to the tongue and palate? The author has had an excellent opportunity to observe a case in which there was a total loss of taste on the left side of the tongue, even to the tip. An autopsy was made which proved that the nerve supply of taste for the top and anterior part of the sides of the tongue comes from the fifth nerve and enter the superior maxillary division of the same nerve. The course then must be from the superior maxillary nerve into the spheno-palatine ganglion, thence by the vidian through the vidian canal to the gangliform enlargement of the facial, along this to the chorda tympani, through the chorda tympani into the lingual, a branch of the inferior maxillary of the fifth.

The conclusion is also reached that the vidian is not a motor root passing from the facial to the spheno-palatine ganglion, but a sensory nerve of the special sense of taste from the spheno-palatine ganglion of the second division of the fifth nerve to the seventh or facial; also nerve fibres of taste for the back of the tongue, fauces and soft palate cannot be carried by the chorda tympani. Proof is also adduced that the root of the glossopharyngeal nerve does not contain any fibres of the special sense of taste.

The route then for the sense of taste, so far as the glossopharyngeal is concerned, would be from the root of the fifth through its third division to the otic ganglion, from this by the small petrosal to the ganglion of the seventh, thence to the tympanic plexus, again by the tympanic branch to the petrous ganglion of the glossopharyngeal and by this latter to the back of the tongue, fauces and palate.

In a criticism on the above article in the Medical News, Vol. LVII. p. 464, by Dr. Chas. L. Dana, he asserts that while the researches noticed seem to prove that loss of taste is due to a disease of the vidian nerve, they do not prove so conclusively that the glossopharyngeal nerve has no gustatory functions.

Sur la physiologie comparée de l'olfaction, M. Raphael Dubois.—Comptes Rendus, Vol. CXI. 66.

The olfactory organs of mollusks have been studied by numerous experimenters, but so far little has been learned of the mechanism of the organs or of their mode of acting. It is a fact that many odors excite the organ of smell of *Helix Pomatia*, a mollusk well adapted to experiments on the special senses. The large tentacles are more sensitive than other parts, while that of the small tentacles, though considerable, is notably less than that of the large ones. As far as the rest of the external covering of the mollusk is concerned, it is excited by only a few odoriferous substances. There is greater sensibility at the extremity of the large tentacles, though it is apparent throughout the

whole length. The experiments on snails were made by separating the tentacles and closing the end with a clamp, then these were put into a vessel containing moist air and it was noticed that after a time the movements of the tentacles ceased, but if some strong vapor, like that of benzine, was introduced into the vessel the movements would begin again with great activity. From these experiments and others in the same line, the author concludes that it is the sensibility of the segments that is first excited, then this sensation is transferred by contraction, which in its turn agitates mechanically the nerve terminals and is conveyed to the sensorial nerve centers. The first excitation is mechanical, just like that which produces the sensation of touch.

Further observations on the development of taste organs in man, Dr. Frederick Tuckerman.—*Journal of Anatomy and Physiology*, Vol. XXIV. p. 130.

In the tongue of the human embryo of the tenth week, the organs were so slightly developed as to be hardly worthy of notice, but in the examination of the tongue of the fœtus of the fourteenth week it was noticed that the upper surface was more or less marked by papillary elevations of the mucus membrane. The different layers of the epithelium were also studied. The striated muscle fibres were clearly to be seen, but the striæ were exceedingly faint. Some papillæ of the circumvallate type, in the early stages of development, were present, and the future position of the trachea was clearly indicated. Lateral gustatory organs could be perceived at the sides of the back of the tongue. But little could be learned of the structure of the bulbs in the circumvallate papillae.

Ueber das Vorhandensein von Geschmacksempfindung im Kehlkopf, Dr. P. Michelson.—*Archiv für pathologische Anatomie und Physiologie und für klinische Medicin*. Vol. CXXIII. 389.

The author has studied the special functions of the taste cells of the inner portion of the trachea. He experimented on 25 persons, by putting into the throat upon the end of a bougie concentrated solutions of quinine and of saccharine. Seventeen persons were able to distinguish the bitter taste of the former, three thought it bitterish and the rest were in doubt as to the taste. With the saccharine solution all but three of the twenty-five could recognize the sweet taste. There was one special case in which the bitter could not be detected at all, while the sweet could be readily recognized. Some, in reply to a question as to the locality where the sensation was recognized, said it was where the solution was applied, others that it was in that region, while some simply located it deep in the throat. The electric current was also applied to the same localities, and it was noticed that the application of one pole produced the sensation of an acid taste and the other of an alkaline taste.

Sur la norme de l'acuité olfactive (olfactie), Zwaardemaker.—*Archives Néerlandaises*, XXV. 131.

From the average acuteness of the sense of smell accurately measured in 21 persons with the author's olfactometer, a norm is reached on which is based a system of measuring and recording the acuteness of smell, modeled after that in use by oculists for visual acuteness. The *olfactie* or average *minimum perceptible* of smell is the unit taken for these measurements. The average for a table of proper proportions of these substances and pictures of the olfactometer may be found in the original. When the mixed odors are delivered to the same nostril it might be supposed that they neutralized each other by some chemical